Blue Ribbon Commission Draft Report
Citizen Action New Mexico Comments

The Blue Ribbon Commission Report, *What We've Heard So Far*, was written before the tragic events in Japan. Even so, the BRC Report is a good indication that the Commission overlooked many concerns prevented at the Albuquerque, New Mexico meeting. Reading the BRC report and watching the misery of multiple reactor meltdowns unfold day by day in Japan and knowing that it will continue possibly for decades should be a wakeup call for the Commission: technical expertise does not protect the public from the most improbable of accidents; belief in reactor design as "failsafe" is a form of religious faith.

The tragic international events in Japan underscore the lack of safety in dealing with nuclear power generation and the storage and disposal of nuclear wastes. Nuclear accidents that were "impossible" or "highly improbable" according to the technical experts are happening right before our eyes at four of six reactors in Japan.

Human error is capable of defeating any well-intentioned design. See, e.g., *The Epistemic Value of Cautionary Tales*, Journal of Technology studies, Vol. XXXII, No. 2 Spring 2006, http://scholar.lib.vt.edu/ejournals/JOTS/v32/v32n2/shields.html

The public is exhausted with the nuclear industry's attempt to spin contrived, duplicitous slogans and false information to minimize the danger for the continued operation and new construction of nuclear reactors. The words "death," "cancer," "leukemia," "earthquake," "seismic," "explosion," "meltdown," are not used at all in the BRC Report, but describe what the worldwide public is now viewing in Japan. The BRC Report is another display of bias, arrogance and failure to confront these above issues that were presented by Citizen Action and others. This suppression of issues stems from the goal of the BRC Report to minimize or ignore the reasons why the Nuclear Renaissance is a fool's game. Conducting "reactor safety checks" will not persuade the public that regulatory processes are protecting their interests. The incestuous relationship between nuclear industry and its regulators prevents an impartial investigation.

President Obama is held hostage by the nuclear industry as evidenced by his support of continued nuclear reactor construction. The BRC Report is rendered obsolete because it fails to consider the Japanese nuclear catastrophe and its consequences.

Nuclear power is touted by the Commission as 'America's Nuclear Future' for "clean, green energy" to counter global climate change. This illusion has been smashed by a tsunami of radioactive contamination, fear and the ongoing damage to people, the ocean, land and food supply. Farmers in the State of Washington dump radioactive milk in the fields. Bans on imported food from Japan are enacted. The experts that had the self-assured perception that they know something that the public cannot perceive now collide with a humbling reality: the public is watching reactors explode, meltdown, and spread terror and death. The radiation levels from the leaking Japanese reactors are thousands of

times higher than what should be present in seawater. Radioactive waste continues to pour into the ocean and travel about the planet on the wind.

Comments from Citizen Action New Mexico to the BRC (January 28, 2011) stated:

> "A major nuclear accident can kill tens or hundreds of thousands of persons and render large areas uninhabitable. A comparable Gulf Coast accident still awaits the nuclear industry -- as if Chernobyl and Three Mile Island were not sufficient warning. Solar and wind generation may be expensive but at least the consequences for an accident are *de minimis* compared to the potential for a nuclear accident."

Additional Citizen Action comments to the BRC committee not addressed are:

- concerns for tsunamis and earthquakes.
- government secrecy and withholding technical reports.
- nuclear energy is a Death Energy Policy that is unnecessary if alternative energies are developed.
- the abandonment of spent fuel in unsafe locations, the potential for terrorist attacks in transport.
- problems with salt mine disposal for long-lived radionuclides.
- the dangers of reprocessing spent fuel and the possibility of catastrophic accidents and ocean pollution from reprocessing.

Citizen Action stated (1/28/2011):

- **"The Department of Energy (DOE) and nuclear industry boosters are grossly out of touch with the public desire, both in the United States and internationally, for alternative and sustainable safe and sane energy policies that can provide greater peace and prosperity in the world.** Nuclear power and the problems associated with the back end of the fuel cycle do not meet the need for safe energy policies. Instead the DOE and the nuclear industry offer programs that fail to consider the significant liabilities/consequences of environmental, political and financial obstacles, proliferation of nuclear materials for terrorists and nations desiring nuclear weapons, transportation issues, release of enormous quantities of radioactive poisons to the communities and the world environment, uranium fuel shortages and ecological and human health consequences of uranium mining."
- The Blue Ribbon Commission must consider the public opposition to nuclear power that continues to exist in the US. Seabrook, Shoreham, Diablo Canyon, Pebble Springs, Three Mile Island are notable past examples."

Are the concerns mentioned beyond the scope of the BRC panel?

Public opposition to nuclear power for the construction of new reactors is growing. Concern for continued operation of existing reactors has dramatically increased. Germany plans to terminate reactor construction and shutdown existing reactors. Extreme reactions also exist: The Swiss lobbyists for nuclear power had their offices

bombed. The lack of public confidence has increased regarding the government and the utility companies' ability to provide emergency response to nuclear accidents.

There is a lack of protection from meltdowns and fires in spent fuel pools that can occur from seismic events. Citizen Action (1/28/2011) has raised the domestic issue of spent fuel left in pools where earthquake and tsunami hazards exist:

> "Documents showed an earthquake fault running beneath the spent fuel pool [at the Trojan Nuclear Plant in Oregon]. The NRC told me they would not consider the new found documents under the legal doctrine of *res judicata* even though the documents had not been considered in earlier siting decisions for the geology of the site. The spent fuel rods are still in storage at the Trojan site next to the Columbia River."
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> "The Humboldt Bay Nuclear Power Plant operated for 13 years (1963-1976) before seismic issues required decommissioning. The 390 spent fuel assemblies are in dry cask storage. The Humboldt site is below sea level in a region subject to earthquakes and tsunamis."

The experts will now tell us that a new generation of nuclear reactors can be "made safer." We are told that the radioactive dosage emitted from Fukushima is "minimal." The Commission should tell those stories to the Japanese parents afraid to give water to their children, return to their village, or eat spinach or fish. The finding of the BEIR VII report of the National Academies of Science is ignored -- all radiation increases the risk of cancer and disease. There is no *zero risk* for radiation. The lack of co-ordinated efforts to monitor radiation from Japan and provide science-based accurate information about radiation hazards in the U.S. is another indication of the lack of emergency preparation for nuclear accidents that are international in scope.

To minimize public apprehension, the NRC offers misinformation by comparing radioactive exposures from the accident to natural background radiation, flights on airplanes, CAT scans and medical X-rays. The government dishonesty enhances public mistrust of government and nuclear power. The public is not receving accurate information about the health effects of radiation both natural and accidental. Immunological studies near nuclear facilities are nearly non-existent. No studies have been performed in Albuquerque even though nuclear facilities and operations have been present for decades for nuclear weapons construction.

The ugly truth is that government, the utilities, nuclear scientists, engineers and regulatory agencies are failing to protect the public. The price of nuclear accidents when they do occur is simply too high because of long term contamination to justify the continuation of nuclear power. Cost of the 1979 loss and cleanup of Three Mile Island was $2 billion. The potential corporate financial gain from nuclear development is so high that perversion of regulatory honesty and meaningful investigation is precluded.

Nuclear corporations are ultimately unwilling to spend the money that would be required to make nuclear energy "safe."

The NRC made a "Confidential Assessment" of the situation in Japan as reported by the NY Times on April 6, 2011. This is another example of US government agency protection of the nuclear industry by withholding full and complete information from the taxpaying public. Why is confidentiality an issue when radiation can affect everyone?

The secrecy of information about the Japanese meltdowns may be related to the existence of a nuclear bomb making program at Fukushima. According to an article entitled *Is Japan's Elite Hiding A Weapons Program Inside Nuclear Plants?* by Yoichi Shimatsu:

> "The smoke and mirrors at Fukushima 1 seem to obscure a steady purpose, an iron will and a grim task unknown to outsiders. The most logical explanation: The nuclear industry and government agencies are scrambling to prevent the discovery of atomic-bomb research facilities hidden inside Japan's civilian nuclear power plants."
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> "A secret nuclear weapons program is a ghost in the machine, detectable only when the system of information control momentarily lapses or breaks down."

Source: http://www.rense.com/general93/hid.htm New America Media News Analysis, Yoichi Shimatsu, Posted 4-6-11.

Citizen Action commented:

> **"Nuclear power generation is subsidized corporate welfare.** No company will risk construction of a reactor unless the financial risk, the insurance risk and the spent fuel waste problems are subsidized."

The Price-Anderson Act allows costs of an accident to assumed by the public rather than the utilities and their investors. There is no financial incentive to protect the public.

The Advanced Test Reactor at the Idaho National Laboratories and the Sandia National Laboratories' Annular Core Research Reactor are examples of operation of unsafe DOE reactors. Neither reactor has containment or is safe in the event of a large seismic event.

I am including two published articles on the subject: The first article is written by Tami Thatcher**,** a former risk assessment analyst for DOE nuclear facilities, who lives in Idaho Falls. The second article, by this author, appeared in the Albuquerque Journal (3/28/11).

Thank you for your consideration of these comments.

Sincerely,

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Post Register Opinion
Idaho Falls, Idaho

As the recent tragedy in Japan unfolds, many people have been following the nuclear drama of keeping reactor cores and stored spent fuel from overheating and releasing airborne radioactive contamination. We may feel that nothing like this could happen here. We have only one operating reactor nearby, the Advanced Test Reactor.

Carefully selected information is presented by DOE and its contractor in order to promote the idea that the ATR is no safety threat. Phrases like "low pressure and temperature," "multiple water reserves," "redundant power supplies" are emphasized. Funny they never seem to mention how different ATR fuel is from a commercial power reactor or how much more complex its frequently modified core configurations and non-symmetrical power distributions, both of which make it easier to overheat the fuel. They never mention the poor reliability performance of various backup power supplies, the poor seismic capability of the water delivery systems overall, the likelihood of a loss of coolant accident, or the accidents that will be so rapidly progressing as to not allow the various make-shift approaches to mitigate an accident. They never seem to say much about the potential radionuclide release and effects on our region.

With or without a seismic event, someday we too could be straining to determine the extent of fuel damage and amount of release by measuring the radiation levels downwind of the ATR.

With the same thinking that brought above ground nuclear weapons testing to Nevada, the ATR was sited remotely and thus did not need a containment or even need particular

attention to emergency systems. Some were added, but mostly as an afterthought. According to DOE's own audits, some safety systems at the ATR have been poorly designed and inadequately maintained and tested. But not to worry, this is accompanied by organizational weaknesses, poor conduct of operations and poor work control as documented in more DOE audit reports. Serious analytical errors have been more the rule rather than the exception at ATR.

The DOE is an agency with a clear conflict of interest when it oversees itself and then has to find the funding to fix the deficiencies.

The good news is that many upgrades to improve the seismic capability of equipment have been completed. I watched a decade or two of foot-dragging to avoid evaluation and upgrade costs, particularly when the site-specific seismic hazard was higher than expected.

The DOE's operational problems are largely unscrutinized by the public and embarrassment is avoided this way. I authored and coauthored many risk studies for the ATR. Unfortunately, the possibility of a significant accident at ATR that releases some of its 1 billion curie radioactive inventory is not nearly as unlikely as DOE would have you believe.

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Albuquerque Journal

Sandia's Reactor Puts Risk in Our Backyard

By David B. Mccoy
Executive Director, Citizen Action New Mexico

As we watch the explosions at nuclear reactors in faraway Japan, we may feel that nothing like this could happen here. But New Mexicans have two nuclear reactors in their backyard, both at Sandia National Laboratories. One of the nuclear reactors, the Annular Core Research Reactor, is in a building that cannot be made safe should a large earthquake happen in Albuquerque. The reactor is located within the take-off and landing pattern used by both Kirtland and the Albuquerque International Sunport.

The ACRR reactor is decades old and has no containment that would keep its radiation from contaminating military personnel, their families and residents of Albuquerque. Ground rupture can occur at the location of the reactor that is in the southwest portion of Sandia Labs.

The Defense Nuclear Facilities Safety Board staff reviewed the ACRR reactor. They found the building and the ventilation system are not built to earthquake safety standards. The construction of the building cannot prevent a radioactive plume from escaping into the community.

A hot-cell facility that handles high-level radioactive waste is housed in the same

unsafe building as the nuclear reactor. The potential for the increased danger from failure of the building's shared safety systems in the event of a strong earthquake has not been analyzed. Other Sandia buildings that are structurally weak could release a chemical cloud exposing many thousands of people to these toxic chemicals. This information can be found in the 1999 Sandia Environmental Impact Statement.

There are many earthquake faults under Kirtland AFB and Sandia Labs. The surrounding public has not been informed of any provisions for evacuation should there be a natural disaster. Dense housing tracts, freeways, military housing, day care centers and schools are located within and along the boundaries of Kirtland AFB where the nuclear reactors are housed.

By allowing the reactor and hot-cell operations in a building that cannot be made safe for earthquakes, Sandia is violating federal laws that require protection for the workers, public and environment (10 Code of Federal Regulations Section 830.204).

Seven years ago, the Safety Board found that unexamined dangers for fire hazards, an airplane crash and equipment operations existed for Sandia's nuclear facilities. The Safety Board pointed out that an explosion, fuel meltdown and unconfined release of radiation took place in Idaho in a reactor using the same design. The Safety Board still has made no recommendation to block approval for the operation of this nuclear reactor.

Sandia informed the Safety Board that it would not be feasible to modify the building structure and ventilation system to act as a safety class confinement system, because the building is a decades-old structure which does not meet earthquake safety criteria.

A Jan. 24, 2005, Sandia analysis, "The Path Ahead to Improve the Nuclear Safety Basis Process at Sandia National Laboratories," identified the root cause that "Sandia has failed to manage the nuclear safety basis program in a formal, systematic manner based on recognized management system standards." The report stated that, "Nuclear safety basis activities have been a low priority for Sandia senior management."

Due to a lack of responsible oversight, the public is at risk for exposure to radioactive and chemical accidents at Sandia. The Safety Board has no authority to enforce nuclear reactor safety standards. The Nuclear Regulatory Commission cannot regulate Department of Energy reactors. The Department of Energy allows operation of this reactor knowing it is housed in an unsafe building. In addition, DOE official Thomas D'Agostino informed the Safety Board that Sandia does not plan to upgrade the building that houses the nuclear reactor and the hot-cell facilities.

New Mexicans need to be aware that there is a vacuum in regulatory authority and accountability to prevent a potential nuclear accident in our backyard.